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MORBIDITY AND MORTALITY WEEKLY REPORT

Epidemiologic Notes and Reports

Herpes Gladiatorum at a High School Wrestling Camp — Minnesota

In July 1989, the Minnesota Department of Health (MDH) investigated an outbreak of herpes simplex virus type 1 (HSV-1) dermatitis (herpes gladiatorum) in participants at a Minnesota wrestling camp. The camp was held July 2 through July 28 and attended by 175 male high school wrestlers from throughout the United States. The participants were divided into three wrestling groups according to weight (group 1, lightest; group 3, heaviest). During most practice sessions, wrestlers had contact only with others in the same group. The outbreak was detected during the final week of camp, and wrestling contact was subsequently discontinued for the final 2 days.

A case was defined as isolation of HSV-1 from involved skin or eye or the presence of cutaneous vesicles. To identify cases, a clinic was held at the camp to obtain viral cultures and examine skin lesions. Additional clinical data were obtained from review of emergency department records at the facility where all affected wrestlers were referred for medical care. A questionnaire was administered to wrestlers by telephone following the conclusion of camp.

Clinical and questionnaire data were available for 171 (98%) persons. The mean age of these participants was 16 years (range: 14–18 years); 153 (89%) were white; 137 (80%) were high school juniors or seniors. The median length of time in competitive wrestling was 4 years.

Sixty (35%) persons met the case definition, including 21 (12%) who had HSV-1 isolated from the skin or eye (Figure 1). All affected wrestlers had onset during the camp session or within 1 week after leaving camp. Two wrestlers had a probable recurrence of HSV, one oral and one cutaneous, during the first week of camp. Lesions were located on the head or neck in 44 (73%) persons, the extremities in 25 (42%), and the trunk in 17 (28%). Herpetic conjunctivitis occurred in five persons; none developed keratitis. Associated signs and symptoms included lymphadenopathy (60%), fever and/or chills (25%), sore throat (40%), and headache (22%). Forty-four (73%) persons were treated with acyclovir.

Herpes Gladiatorum — Continued

Attack rates increased by weight group: of 55 wrestlers in group 1, 12 (22%) were affected; of 57 in group 2, 17 (30%); and of 59 in group 3, 31 (53%) ($p=0.01$). Thirty-eight (22%) wrestlers interviewed reported a past history of oral HSV-1 infection. The attack rate was 24% for wrestlers who reported a past history of oral herpes and 38% for wrestlers without a history of oral herpes (relative risk [RR] = 0.6; 95% confidence interval [CI] = 0.3–1.0). Twenty-three percent of affected wrestlers continued to wrestle for at least 2 days after rash onset. Athletes who reported wrestling with a participant with a rash were more likely to have confirmed or probable HSV-1 infection (RR = 2.0; 95% CI = 1.3–3.1).

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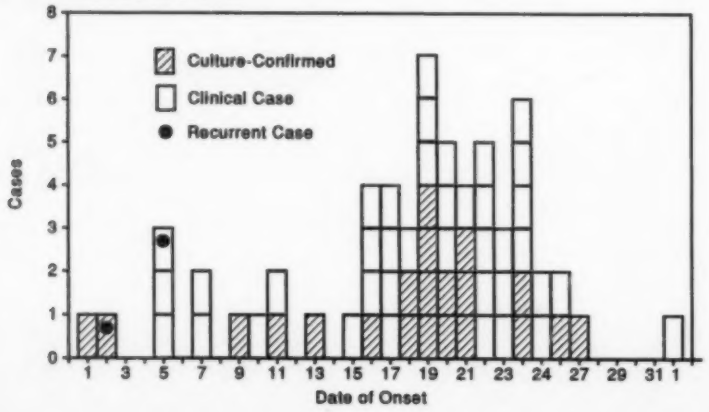
Editorial Note: Herpes gladiatorum (cutaneous infection with HSV in wrestlers and rugby players) was first described in the mid-1960s (*1–3*). In 1988, an outbreak of herpes gladiatorum was reported among three Wisconsin high school wrestling teams (*4*). In a national survey of 1477 trainers of athletes, approximately 3% of high school wrestlers were reported to have developed HSV skin infections during the 1984–85 season (*5*). Lesions occur most often on the head and neck. Primary infection may cause constitutional symptoms with fever, malaise, weight loss, and regional lymphadenopathy. Ocular involvement includes keratitis, conjunctivitis, and blepharitis.

Transmission occurs primarily through skin-to-skin contact. Autoinoculation may lead to involvement of multiple sites. Previous infection with HSV-1 may reduce the risk of acquiring herpes gladiatorum (*5*). However, the prevalence of antibody to HSV-1 is low among white adolescents (*6*), and many adolescents are susceptible when they enter competitive wrestling. Control methods should include education of athletes and trainers regarding herpes gladiatorum, routine skin examinations before wrestling contact, and exclusion of wrestlers with suspicious skin lesions. The

FIGURE 1. Herpes gladiatorum cases at a high school wrestling camp, by date of onset — Minnesota, July 1989



Herpes Gladiatorum — Continued

outbreak in the Minnesota camp might have been prevented if athletes with such lesions had been promptly excluded from contact competition.

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Pneumococcal Endophthalmitis after Ocular Surgery — Alaska, California

Endophthalmitis, a catastrophic condition associated with loss of visual acuity in up to 77% of cases (*1*), complicates 0.1% of the more than 36,000 corneal transplant surgeries done in the United States and Canada each year (*2,3*). Some of these infections are caused by organisms transmitted by donor corneas (*4–6*). This report summarizes four cases in which such infection occurred.

Alaska. In June 1988, two patients developed endophthalmitis following corneal transplant surgery. Both transplants were performed by the same surgeon using transplant tissue harvested 5 days earlier from a 3-year-old drowning victim. One patient, a 40-year-old man, required enucleation of the affected eye; the other patient, an 11-year-old boy, had loss of vision in the affected eye after the infection resolved. Both patients had signs of infection within 48 hours after the transplant surgery. *Streptococcus pneumoniae* type 14 was isolated from conjunctival swabs of the affected eyes of both patients. Antimicrobial resistance patterns were identical, including intermediate resistance to gentamicin (minimum inhibitory concentrations = 8 μg/mL). Donor corneoscleral tissue was not cultured. Both grafts had been stored in commercially available McCarey-Kaufman buffered medium containing gentamicin (100 μg/mL). Each patient had received a single subconjunctival injection of gentamicin after transplantation.

California. In May 1989, two patients developed endophthalmitis following corneal transplantation performed on the same day by different surgeons in different cities. Each transplant used tissue obtained from a 29-year-old motorcycle-crash victim who had been supported on a ventilator for 4 days before death. In one patient, a 76-year-old woman, gram-positive cocci were detected in exudate from a corneal ulcer, and *S. pneumoniae* was isolated from donor corneoscleral tissue. For the other patient, a 30-year-old man, *S. pneumoniae* was isolated from vitreous material; however, culture was not obtained on this corneoscleral tissue before transplantation. Serotyping and antimicrobial susceptibility testing were not performed on these isolates. Both patients had symptoms of infection within 24 hours after transplant surgery. The grafts were harvested 3 days before the transplantations and stored in McCarey-Kaufman buffered medium containing 100 μg/mL gentamicin. Each patient

Pneumococcal Endophthalmitis — Continued

had received a single subconjunctival injection of gentamicin following transplantation and both required enucleation of the affected eyes.

CDC examined *S. pneumoniae* survival in the buffered medium (containing gentamicin) under conditions recommended for cornea storage; 6000 colony-forming units (CFU) of a *S. pneumoniae* strain isolated from one of the Alaska patients were inoculated into 5 mL of the same buffered cornea storage medium containing 100 µg/mL gentamicin and kept at 4 C (39.2 F). *S. pneumoniae* was detectable in the medium after 4 days (720 CFU) and 11 days (160 CFU), but not after 14 days.

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Editorial Note: *Staphylococcus epidermidis* and *Staphylococcus aureus* are the most common infecting organisms for postoperative endophthalmitis after corneal transplant surgeries, followed by gram-negative bacilli and various streptococci (*6,7*). *Streptococcus pneumoniae* has been reported as an infrequent cause of infection (*8–10*).

Gentamicin is the sole antibiotic supplement used in commercial cornea storage medium because it has been reported to be more effective than penicillin or cephalothin in reducing the colony counts of *S. aureus* and gram-negative bacilli in a buffered medium (*11*). However, streptococci are frequently resistant to gentamicin. Supplementation of the medium with gentamicin is intended to preserve the medium before use and not to sterilize corneal tissue. CDC in vitro studies reported here have demonstrated gentamicin to be ineffective in eliminating one of the infecting strains of *S. pneumoniae* from cornea storage medium within 11 days. In addition, the four patients reported here had received prophylactic gentamicin by the subconjunctival route. Thus, use of gentamicin alone in cornea storage media or as prophylaxis following corneal transplant surgery may not prevent the rare complication of pneumococcal endophthalmitis.

In the four cases described in this report, contamination of the corneal grafts with *S. pneumoniae* could have occurred before harvest, at harvest, during storage, or at time of transplantation. However, culture of donor corneoscleral tissue indicated that at least one of the grafts had been contaminated with *S. pneumoniae* before transplantation.

When cultured, a high proportion (12%–100%) of corneoscleral grafts have yielded contaminating organisms (*2,12,13*). Even though postoperative endophthalmitis is rare, the Eye Bank Association of America has recommended routine culture of the corneoscleral rim before and/or at the time of surgery (*14*); when there is clinical evidence of infection, the culture results can be used to guide initiation of appropriate and timely antimicrobial therapy.

Because of the need to further characterize the epidemiology of pneumococcal endophthalmitis following ocular surgery, physicians are asked to report such cases through state health departments to the Respiratory Diseases Branch, Division of Bacterial Diseases, Center for Infectious Diseases, CDC; telephone (404) 639-3021.

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Pneumococcal Endophthalmitis — Continued

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Progress in Chronic Disease Prevention

Anemia during Pregnancy in Low-Income Women — United States, 1987

Approximately 5% of nonpregnant women of reproductive age have anemia (*1*). Although anemia during pregnancy is associated with adverse outcomes (e.g., premature delivery, low birth weight, and fetal death) (*2,3*), the prevalence of anemia among pregnant women in the United States is not well defined.

Hematologic data from the 1987 CDC Pregnancy Nutrition Surveillance System (PNSS) (*4*) were used to characterize the pattern of anemia during pregnancy among a population of low-income women. The PNSS includes records of prenatal care submitted by public health and nutrition programs from 13 states* and the District of Columbia. In 1987, PNSS received records for 63,709 women aged 15–39 years. Most (95%) records were submitted by clinics of the Special Supplemental Food Program for Women, Infants, and Children (WIC)†. A hemoglobin (Hb) or hematocrit (Hct) value and a date of last menstrual period (LMP) were available for 58,066 (91%) women. Of these, 36,474 (63%) were white, and 21,572 (37%) were black. The race and age distributions were similar for those women for whom hematologic and LMP data were not available.

*Colorado, Connecticut, Florida, Illinois, Indiana, Kentucky, Maryland, Nebraska, Nevada, New Jersey, North Carolina, Oregon, and Utah.

†The WIC program, designed to provide nutrition education and specific foods to children ≤5 years of age, lactating mothers, and pregnant and postpartum women, is closely associated with health-care delivery services.

Anemia — Continued

Cutoff values used to define anemia during each trimester of pregnancy were: first and third trimester—Hb <11 gm/dL or Hct <33%; second trimester—Hb <10.5 gm/dL or Hct <32% (*5*).

For both black and white women, the mean Hb and Hct values declined steadily during the first and second trimesters and reached nadir early in the third trimester. The mean values then increased slightly for the remainder of the third trimester (Figure 1 [Hct not shown]).

The prevalence of anemia increased during the second and third trimesters. The prevalence for white women and for black women, respectively, was 3.5% and 12.7% during the first trimester, 6.4% and 17.8% during the second, and 18.8% and 38.1% during the third.

Anemia was more prevalent among younger women, except for white women in the 35–39 age group. For all age groups, the prevalence of anemia was higher among black women than among white women (Figure 2).

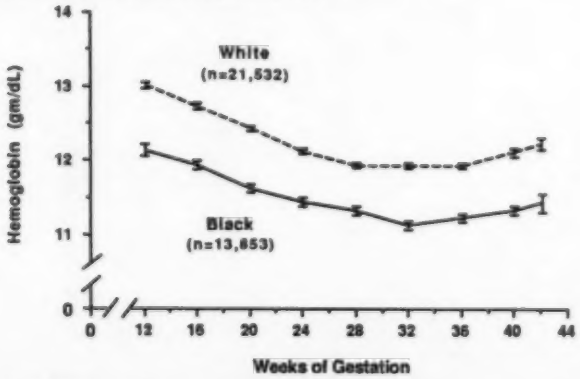
Earlier enrollment in WIC was associated with a lower prevalence of anemia (Figure 3). For enrollment at all trimesters, black women had a higher prevalence of anemia than white women.

Reported by: Div of Nutrition, Center for Chronic Disease Prevention and Health Promotion, CDC.

Editorial Note: Among pregnant women who receive sufficient iron, Hb levels normally decrease early in pregnancy, then increase throughout the third trimester, ultimately attaining near prepregnancy levels (*5,6*). For women included in the PNSS, the incomplete rise of mean Hb levels (i.e., the failure to attain near prepregnancy levels) during the third trimester suggests that many of these women were iron deficient during pregnancy (*6*).

Hb values were lower among black women than among white women throughout pregnancy and may be related to a greater risk for iron deficiency in black women. However, differences in Hb and Hct levels by race—even when controlled for nutritional status—have been described previously, and the explanation for the

FIGURE 1. Mean hemoglobin levels, by race and weeks of pregnancy completed — Pregnancy Nutrition Surveillance System, 1987*



*Error bars include 95% confidence intervals.

Anemia — Continued

difference observed in this analysis is unclear (*7,8*). The higher prevalences of anemia among young women during the third trimester and among those women who enrolled in public health programs during the second and third trimesters suggest that these groups are at a greater health and nutrition risk. It is possible that early enrollment in public health programs such as WIC may improve iron nutrition status during pregnancy and reduce the prevalence of anemia.

The high prevalence of anemia during the third trimester among women in the PNSS suggests that many low-income women have poor iron nutrition both before and during pregnancy. Further efforts to promote early enrollment in public health and nutrition programs, provide iron nutrition education, and ensure timely referral

FIGURE 2. Prevalence of anemia during third trimester of pregnancy, by race and age — Pregnancy Nutrition Surveillance System, 1987

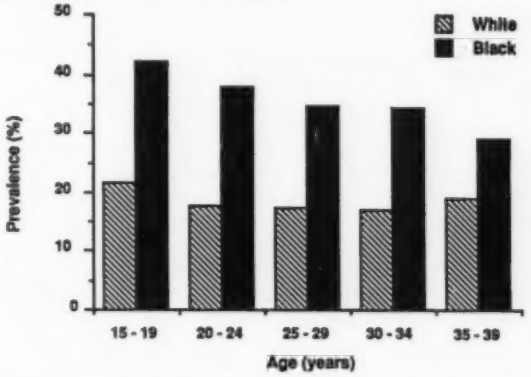
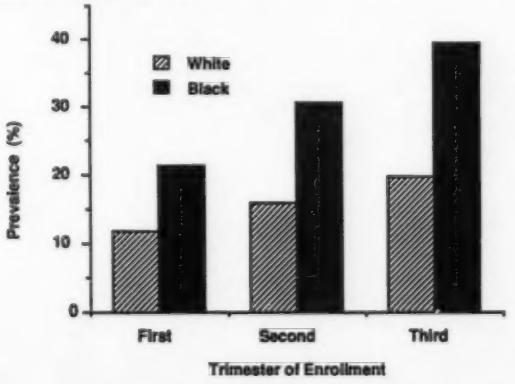


FIGURE 3. Prevalence of anemia during third trimester of pregnancy, by race and trimester of enrollment in public health and nutrition programs — Pregnancy Nutrition Surveillance System, 1987



Anemia — Continued

and follow-up of anemic women may lead to improved iron nutrition during pregnancy.

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(Continued on page 81)

TABLE I. Summary — cases of specified notifiable diseases, United States

Disease	5th Week Ending			Cumulative, 5th Week Ending		
	Feb. 3, 1990	Feb. 4, 1989	Median 1985-1989	Feb. 3, 1990	Feb. 4, 1989	Median 1985-1989
Acquired Immunodeficiency Syndrome (AIDS)	509	U*	237	3,932	2,668	1,634
Aseptic meningitis	52	85	78	400	365	380
Encephalitis: Primary (arthropod-borne & unspec)	7	8	17	49	50	71
Post-infectious	-	1	1	6	7	6
Gonorrhea: Civilian	10,143	14,084	15,396	59,474	62,385	78,946
Military	104	248	252	896	988	1,275
Hepatitis: Type A	428	622	485	2,063	2,763	2,075
Type B	307	356	412	1,436	1,645	1,985
Non A, Non B	33	46	51	166	213	249
Unspecified	19	35	62	146	179	297
Legionellosis	25	16	14	94	74	71
Leprosy	1	2	2	10	9	15
Malaria	6	29	13	76	82	55
Measles: Total†	90	60	24	540	295	112
Indigenous	62	50	19	418	275	96
Imported	28	10	8	122	20	20
Meningococcal infections	36	57	71	244	225	273
Mumps	132	98	98	442	478	392
Pertussis	16	24	24	178	196	154
Rubella (German measles)	1	-	2	26	16	19
Syphilis (Primary & Secondary): Civilian	788	902	670	3,589	3,483	3,195
Military	-	5	5	15	28	17
Toxic Shock syndrome	10	3	8	32	26	27
Tuberculosis	307	323	356	1,581	1,504	1,365
Tularemia	-	1	1	4	8	9
Typhoid Fever	3	13	6	25	33	24
Typhus fever, tick-borne (RMSF)	-	2	1	7	6	6
Rabies, animal	43	87	71	248	349	318

TABLE II. Notifiable diseases of low frequency, United States

	Cum. 1990		Cum. 1990
Anthrax	-	Leptospirosis (Hawaii 1)	1
Botulism: Foodborne	-	Plague	-
Infant	3	Poliomyelitis, Paralytic,§	-
Other	-	Psittacosis (Delaware 2, N.C. 3)	21
Brucellosis	2	Rabies, human	-
Cholera	-	Tetanus	4
Congenital rubella syndrome	-	Trichinosis	4
Congenital syphilis, ages < 1 year	-		
Diphtheria	-		

*Because AIDS cases are not received weekly from all reporting areas, comparison of weekly figures may be misleading.
†Five of the 90 reported cases for this week were imported from a foreign country or can be directly traceable to a known internationally imported case within two generations.
§No cases of suspected poliomyelitis have been reported in 1990; none of 13 suspected cases in 1989 have been confirmed to date. Nine of 14 suspected cases in 1988 were confirmed and all were vaccine-associated.

TABLE III. Cases of specified notifiable diseases, United States, weeks ending February 3, 1990 and February 4, 1989 (5th Week)

Reporting Area	AIDS	Aseptic Meningitis	Encephalitis		Gonorrhea (Civilian)		Hepatitis (Viral), by type				Legionellosis	Leprosy
			Primary	Post-infectious			A	B	NA,NB	Unspecified		
	Cum. 1990	Cum. 1990	Cum. 1990	Cum. 1990	Cum. 1990	Cum. 1989	Cum. 1990	Cum. 1990	Cum. 1990	Cum. 1990	Cum. 1990	Cum. 1990
UNITED STATES	3,932	400	49	6	89,474	62,385	2,053	1,436	166	146	94	10
NEW ENGLAND	149	31	4	-	1,997	1,893	34	106	4	9	3	-
Maine	8	1	-	-	19	32	-	3	-	1	-	-
N.H.	21	1	-	-	239	16	1	8	-	1	-	-
Vt.	-	2	-	-	9	9	1	3	1	-	1	-
Mass.	78	12	1	-	806	707	22	82	3	7	1	-
R.I.	1	13	-	-	97	167	4	9	-	-	1	-
Conn.	41	2	3	-	1,027	962	6	1	-	-	-	-
MID. ATLANTIC	1,385	68	1	-	5,742	8,663	336	193	26	8	20	4
Upstate N.Y.	243	26	1	-	1,164	1,423	43	52	5	-	6	-
N.Y. City	809	5	-	-	2,056	2,800	30	59	3	1	1	3
N.J.	203	-	-	-	1,512	1,141	36	20	9	-	3	1
Pa.	130	37	-	-	1,010	3,299	227	62	9	7	10	-
E.N. CENTRAL	220	74	8	1	11,867	11,482	104	214	16	11	30	-
Ohio	40	24	1	1	4,076	3,229	25	57	6	2	11	-
Ind.	37	17	1	-	1,070	696	15	72	2	4	4	-
Ill.	73	4	2	-	3,191	3,313	10	6	1	-	-	-
Mich.	43	29	4	-	3,188	3,216	46	61	7	5	11	-
Wis.	27	-	-	-	342	1,028	8	18	-	-	4	-
W.N. CENTRAL	117	15	1	-	3,801	2,639	67	30	5	2	3	-
Minn.	15	-	-	-	427	278	7	3	1	-	-	-
Iowa	3	1	1	-	308	200	24	8	1	1	-	-
Mo.	80	5	-	-	2,113	1,590	23	11	-	-	3	-
N. Dak.	-	-	-	-	16	16	1	-	-	-	-	-
S. Dak.	1	1	-	-	27	27	4	1	2	-	-	-
Nebr.	3	7	-	-	179	219	8	5	1	-	-	-
Kans.	15	1	-	-	731	309	-	2	-	1	-	-
S. ATLANTIC	765	88	16	-	18,532	17,425	241	301	27	17	13	-
Del.	11	3	-	-	224	264	11	4	1	-	-	-
Md.	93	20	3	-	2,111	1,409	136	56	3	1	6	-
D.C.	46	1	-	-	365	1,147	2	1	1	-	-	-
Va.	152	23	6	-	1,494	1,544	7	26	3	13	2	-
W. Va.	10	1	-	-	138	174	4	15	-	-	-	-
N.C.	55	11	6	-	3,700	2,764	34	89	14	-	2	-
S.C.	43	-	-	-	1,837	1,978	8	75	3	2	2	-
Ga.	102	3	1	-	4,354	3,104	22	19	1	1	1	-
Fla.	253	26	-	-	4,309	5,041	17	16	1	-	-	-
E.S. CENTRAL	84	24	4	-	5,093	5,378	38	110	12	1	9	-
Ky.	17	5	-	-	496	428	12	33	3	1	1	-
Tenn.	28	4	1	-	1,364	1,694	8	53	5	-	4	-
Ala.	21	12	3	-	2,098	1,594	18	24	4	-	4	-
Miss.	18	3	-	-	1,135	1,662	-	-	-	-	-	-
W.S. CENTRAL	467	9	-	1	5,378	6,826	128	62	1	5	5	5
Ark.	7	-	-	-	749	685	40	7	-	-	-	-
La.	98	1	-	-	1,156	1,025	7	18	-	-	1	-
Okla.	27	3	-	1	515	726	53	18	1	1	4	-
Tex.	335	5	-	-	2,958	4,390	28	19	-	4	-	5
MOUNTAIN	116	20	3	-	1,224	1,231	330	129	13	20	7	-
Mont.	3	1	-	-	12	19	4	7	-	-	-	-
Idaho	5	-	-	-	8	25	5	10	4	-	-	-
Wyo.	-	1	1	-	14	9	12	2	-	-	-	-
Colo.	37	4	-	-	248	186	16	14	1	9	-	-
N. Mex.	3	3	-	-	104	109	33	14	-	-	-	-
Ariz.	33	6	2	-	518	435	215	40	7	6	3	-
Utah	15	1	-	-	37	58	14	5	-	2	-	-
Nev.	20	4	-	-	283	398	31	37	1	3	4	-
PACIFIC	629	71	12	4	5,840	6,848	785	291	62	73	4	1
Wash.	79	-	1	-	688	631	62	26	7	2	-	-
Oreg.	16	-	-	-	283	276	112	38	6	2	-	-
Calif.	517	65	11	3	4,711	5,764	589	220	48	69	4	-
Alaska	5	-	-	-	131	129	18	3	1	-	-	-
Hawaii	12	6	-	1	27	28	24	4	-	-	-	1
Guam	1	-	-	-	18	15	2	1	-	2	-	-
P.R.	212	16	4	-	-	73	3	4	-	-	-	-
V.I.	1	-	-	-	37	39	-	-	-	-	-	-
Amer. Samoa	-	-	-	-	-	8	-	-	-	-	-	-
C.N.M.I.	-	-	-	-	-	10	-	-	-	-	-	-

N: Not notifiable U: Unavailable C.N.M.I.: Commonwealth of the Northern Mariana Islands

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending February 3, 1990 and February 4, 1989 (5th Week)

Reporting Area	Malaria	Measles (Rubeola)					Meningococcal infections	Mumps		Pertussis			Rubella		
		Indigenous		Imported*		Total									
	Cum. 1990	1990	Cum. 1990	1990	Cum. 1990	Cum. 1989	Cum. 1990	1990	Cum. 1990	1990	Cum. 1990	Cum. 1989	1990	Cum. 1990	Cum. 1989
UNITED STATES	76	62	418	28	122	295	244	132	442	16	178	196	1	28	16
NEW ENGLAND	12	-	-	-	1	3	19	-	3	4	41	12	-	1	-
Maine	-	-	-	-	-	-	4	-	-	-	1	4	-	-	-
N.H.	-	-	-	-	1	-	-	-	1	-	-	5	-	-	-
Vt.	2	-	-	-	-	-	1	-	-	-	1	1	-	-	-
Mass.	8	-	-	-	-	3	12	-	2	3	38	-	-	-	-
R.I.	-	-	-	-	-	-	-	-	-	-	-	2	-	1	-
Conn.	2	-	-	-	-	-	2	-	-	1	1	-	-	-	-
MID. ATLANTIC	12	3	18	-	8	21	33	1	29	-	14	21	-	1	1
Upstate N.Y.	2	-	2	-	1	-	12	1	9	-	6	4	-	-	1
N.Y. City	6	2	3	-	1	10	2	-	-	-	-	-	-	-	-
N.J.	2	-	-	-	-	10	8	-	7	-	2	16	-	1	-
Pa.	3	1	13	-	6	1	11	-	13	-	6	1	-	-	-
E.N. CENTRAL	5	29	196	23	99	46	33	5	33	-	39	22	-	4	1
Ohio	2	-	-	-	-	45	10	-	-	-	-	1	-	-	-
Ind.	-	-	3	-	-	-	5	-	4	-	26	-	-	-	-
Ill.	-	1	55	-	-	-	8	-	3	-	1	5	-	4	-
Mich.	2	28	28	23§	99	-	7	5	20	-	8	3	-	-	-
Wis.	1	-	112	-	-	1	3	-	6	-	4	13	-	-	1
W.N. CENTRAL	-	-	19	-	-	157	9	7	16	-	1	3	-	-	1
Minn.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iowa	-	-	19	-	-	-	1	1	3	-	-	3	-	-	-
Mo.	-	-	-	-	-	157	3	-	-	-	-	-	-	-	1
N. Dak.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Nebr.	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-
Kans.	-	-	-	-	-	-	3	6	12	-	-	-	-	-	-
S. ATLANTIC	13	12	25	3	11	4	46	53	166	7	30	6	-	-	-
Del.	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Md.	4	1	8	3†	9	3	8	27	93	3	13	1	-	-	-
D.C.	2	-	-	-	-	1	-	-	2	-	1	-	-	-	-
Va.	6	1	3	-	2	-	6	3	8	-	1	1	-	-	-
W. Va.	-	-	-	-	-	-	-	1	7	2	5	-	-	-	-
N.C.	1	-	-	-	-	-	6	8	19	1	5	1	-	-	-
S.C.	-	-	-	-	-	-	6	-	8	-	-	-	-	-	-
Ga.	-	1	1	-	-	-	11	11	11	1	3	-	-	-	-
Fla.	1	9	13	-	-	-	9	3	18	-	1	3	-	-	-
E.S. CENTRAL	3	-	7	-	-	1	11	2	20	2	11	11	-	-	-
Ky.	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-
Tenn.	2	-	2	-	-	-	4	-	4	-	1	8	-	-	-
Ala.	1	-	-	-	-	1	4	1	3	2	10	2	-	-	-
Miss.	-	-	5	-	-	-	-	N	N	-	-	1	-	-	-
W.S. CENTRAL	-	18	18	2	2	1	13	58	116	1	6	3	-	-	-
Ark.	-	-	-	-	-	-	1	3	21	-	-	1	-	-	-
La.	-	-	-	-	-	1	3	5	22	-	1	-	-	-	-
Okla.	-	3	3	-	-	-	5	49	61	1	5	2	-	-	-
Tex.	-	15	15	2†	2	-	4	1	12	-	-	-	-	-	-
MOUNTAIN	1	-	6	-	-	14	5	5	27	2	10	85	-	-	1
Mont.	-	-	-	-	-	13	3	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-	3	14	2	2	6	-	-	-
Wyo.	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-
Colo.	-	-	-	-	-	-	1	-	2	-	1	9	-	-	-
N. Mex.	-	-	-	-	-	-	-	N	N	-	6	1	-	-	-
Ariz.	1	-	6	-	-	1	-	1	6	-	1	68	-	-	-
Utah	-	-	-	-	-	-	-	1	2	-	-	-	-	-	-
Nev.	-	-	-	-	-	-	1	-	1	-	-	1	-	-	1
PACIFIC	30	-	127	-	1	48	75	1	33	-	26	33	1	22	12
Wash.	1	-	-	-	-	-	7	1	3	-	2	1	-	-	-
Oreg.	2	-	-	-	-	-	7	N	N	-	2	-	-	-	-
Calif.	27	-	127	-	1	45	59	-	29	-	20	32	-	19	12
Alaska	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-
Hawaii	-	-	-	-	-	3	-	-	1	-	2	-	1	3	-
Guam	1	U	-	U	-	-	-	U	-	U	-	1	U	-	-
P.R.	-	-	-	-	-	37	1	-	2	-	-	-	-	-	-
V.I.	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Amer. Samoa	-	U	-	U	-	-	-	U	-	U	-	-	U	-	-
C.N.M.I.	-	U	-	U	-	-	-	U	-	U	-	-	U	-	-

*For measles only, imported cases includes both out-of-state and international importations.
N: Not notifiable U: Unavailable †International §Out-of-state

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending February 3, 1990 and February 4, 1989 (5th Week)

Reporting Area	Syphilis (Civilian) (Primary & Secondary)		Toxic-shock Syndrome	Tuberculosis		Tula-remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum. 1990	Cum. 1989	Cum. 1990	Cum. 1990	Cum. 1989	Cum. 1990	Cum. 1990	Cum. 1990	Cum. 1990
UNITED STATES	3,589	3,483	32	1,581	1,504	4	25	7	248
NEW ENGLAND	177	180	2	18	36	-	-	-	-
Maine	1	-	-	-	1	-	-	-	-
N.H.	23	-	-	1	4	-	-	-	-
Vt.	-	-	-	1	1	-	-	-	-
Mass.	47	64	1	1	6	-	-	-	-
R.I.	-	8	-	7	9	-	-	-	-
Conn.	106	111	1	8	15	-	-	-	-
MID. ATLANTIC	638	704	7	408	351	1	7	1	67
Upstate N.Y.	47	67	3	15	22	-	4	-	3
N.Y. City	308	194	1	320	246	-	-	-	-
N.J.	152	143	-	28	36	1	3	1	19
Pa.	31	300	3	45	47	-	-	-	45
E.N. CENTRAL	213	150	8	176	180	-	2	1	4
Ohio	51	5	3	13	45	-	1	-	-
Ind.	1	4	1	12	6	-	-	-	-
Ill.	80	73	-	100	89	-	-	-	1
Mich.	74	63	4	41	53	-	1	1	-
Wis.	27	5	-	10	7	-	-	-	3
W.N. CENTRAL	34	31	1	39	48	1	-	-	33
Minn.	11	2	-	12	9	-	-	-	21
Iowa	4	7	-	3	7	-	-	-	-
Mo.	16	13	-	14	13	1	-	-	-
N. Dak.	1	-	-	2	4	-	-	-	1
S. Dak.	-	-	-	2	5	-	-	-	8
Nebr.	2	9	1	6	1	-	-	-	-
Kans.	-	-	-	-	9	-	-	-	3
S. ATLANTIC	1,483	1,249	-	221	252	1	1	1	77
Del.	17	6	-	1	1	-	-	-	2
Md.	127	84	-	31	19	-	1	-	32
D.C.	32	56	-	2	21	-	-	-	-
Va.	56	57	-	13	36	-	-	-	17
W. Va.	2	3	-	4	7	-	-	-	1
N.C.	158	65	-	32	19	1	-	1	1
S.C.	99	62	-	37	42	-	-	-	9
Ga.	377	264	-	30	29	-	-	-	15
Fla.	615	612	-	71	78	-	-	-	-
E.S. CENTRAL	382	208	4	103	117	-	-	1	6
Ky.	9	4	-	38	37	-	-	-	3
Tenn.	135	56	2	28	16	-	-	1	-
Ala.	120	84	2	29	46	-	-	-	3
Miss.	98	64	-	8	18	-	-	-	-
W.S. CENTRAL	416	425	1	164	106	-	1	2	27
Ark.	20	37	-	25	14	-	-	-	2
La.	186	79	-	13	7	-	-	-	-
Okla.	24	4	1	8	1	-	-	2	7
Tex.	186	305	-	118	84	-	1	-	18
MOUNTAIN	86	79	4	31	43	1	2	-	8
Mont.	-	-	-	-	-	-	-	-	2
Idaho	1	-	1	-	1	-	-	-	-
Wyo.	-	-	1	-	-	-	-	-	4
Colo.	4	4	-	-	-	-	-	-	-
N. Mex.	7	1	1	14	6	1	-	-	1
Ariz.	45	24	1	6	28	-	2	-	-
Utah	1	4	-	-	-	-	-	-	-
Nev.	28	46	-	11	6	-	-	-	1
PACIFIC	280	467	5	421	371	-	12	1	26
Wash.	-	30	-	29	13	-	-	-	-
Oreg.	7	26	-	12	10	-	-	-	-
Calif.	268	401	4	366	328	-	11	1	22
Alaska	1	-	-	-	3	-	-	-	4
Hawaii	4	-	1	14	17	-	1	-	-
Guam	-	2	-	6	9	-	-	-	-
P.R.	-	22	-	1	6	-	-	-	12
V.I.	-	1	-	-	1	-	-	-	-
Amer. Samoa	-	-	-	-	-	-	-	-	-
C.N.M.I.	-	1	-	-	-	-	-	-	-

U: Unavailable

TABLE IV. Deaths in 121 U.S. cities,* week ending February 3, 1990 (5th Week)

Reporting Area	All Causes, By Age (Years)						P&I**
	All Ages	≥65	45-64	25-44	1-24	<1	Total
NEW ENGLAND	762	544	133	49	17	19	86
Boston, Mass.	236	151	54	15	4	12	32
Bridgeport, Conn.	54	40	7	4	3	-	8
Cambridge, Mass.	23	20	1	1	1	-	3
Fall River, Mass.	33	27	5	1	-	-	2
Hartford, Conn.	62	48	7	4	3	-	9
Lowell, Mass.	29	19	8	2	-	-	3
Lynn, Mass.	24	21	3	-	-	-	2
New Bedford, Mass.	30	20	7	3	-	-	1
New Haven, Conn.	37	30	3	3	1	-	6
Providence, R.I.	81	60	13	3	3	2	5
Somerville, Mass.	5	5	-	-	-	-	-
Springfield, Mass.	44	29	8	4	1	2	5
Waterbury, Conn.	40	33	4	2	-	1	7
Worcester, Mass.	64	41	13	7	1	2	3
MID. ATLANTIC	3,081	2,065	609	274	69	63	247
Albany, N.Y.	56	39	11	2	2	2	2
Allentown, Pa.	22	18	4	2	-	-	2
Buffalo, N.Y.	100	68	25	2	2	3	8
Camden, N.J.	50	30	15	2	1	2	-
Elizabeth, N.J.	35	24	7	-	4	-	5
Erie, Pa.†	51	47	2	-	-	2	9
Jersey City, N.J.	66	39	13	10	3	-	5
N.Y. City, N.Y.	1,639	1,069	339	166	38	27	112
Newark, N.J.	93	34	23	27	6	3	21
Paterson, N.J.	27	14	7	6	-	-	2
Philadelphia, Pa.	409	272	74	36	9	17	32
Pittsburgh, Pa.†	95	75	15	3	1	1	5
Reading, Pa.	42	33	8	-	-	1	8
Rochester, N.Y.	137	102	27	5	-	3	19
Schenectady, N.Y.	27	26	1	-	-	-	-
Scranton, Pa.†	37	32	4	1	-	-	3
Syracuse, N.Y.	111	80	21	6	2	2	10
Trenton, N.J.	26	18	6	4	-	-	2
Utica, N.Y.	20	18	3	-	1	-	1
Yonkers, N.Y.	39	33	4	2	-	-	1
E.N. CENTRAL	2,810	1,786	467	181	58	98	187
Akron, Ohio	48	32	12	2	2	-	-
Canton, Ohio	39	27	10	1	1	-	5
Chicago, Ill.§	564	362	125	45	10	22	16
Cincinnati, Ohio	169	121	35	9	1	3	25
Cleveland, Ohio	199	127	39	15	10	8	9
Columbus, Ohio	226	157	36	19	4	10	10
Dayton, Ohio	141	106	16	9	6	4	13
Detroit, Mich.	281	162	56	34	8	21	17
Evansville, Ind.	58	46	7	1	1	3	3
Fort Wayne, Ind.	68	51	11	1	3	2	8
Gary, Ind.	10	6	2	2	-	-	-
Grand Rapids, Mich.	59	36	14	7	1	1	6
Indianapolis, Ind.	193	131	34	15	4	9	13
Madison, Wis.	36	21	11	2	1	1	1
Milwaukee, Wis.	171	142	23	4	1	1	16
Peoria, Ill.	61	42	15	2	1	1	13
Rockford, Ill.	53	40	5	4	-	4	4
South Bend, Ind.	41	32	4	2	1	2	4
Toledo, Ohio	112	87	17	4	2	2	12
Youngstown, Ohio	81	58	15	3	1	4	12
W.N. CENTRAL	1,034	782	168	40	20	24	86
Des Moines, Iowa	69	52	13	2	-	2	3
Duluth, Minn.	27	21	5	-	-	1	2
Kansas City, Kans.	73	63	6	3	1	-	3
Kansas City, Mo.	145	90	34	10	6	5	14
Lincoln, Nebr.	45	39	3	2	1	-	8
Minneapolis, Minn.	202	147	39	9	1	6	21
Omaha, Nebr.	106	79	18	5	1	3	11
St. Louis, Mo.	132	101	19	3	7	2	-
St. Paul, Minn.	66	48	12	2	1	3	5
Wichita, Kans.	169	142	19	4	2	2	19
S. ATLANTIC	1,548	988	316	164	47	47	133
Atlanta, Ga.	224	134	42	22	14	12	14
Baltimore, Md.	284	185	63	26	7	3	27
Charlotte, N.C.	66	43	15	3	4	1	14
Jacksonville, Fla.	124	81	26	12	3	2	13
Miami, Fla.	134	75	37	17	2	3	-
Norfolk, Va.	80	56	15	5	3	1	7
Richmond, Va.	94	60	19	7	5	3	11
Savannah, Ga.	130	89	19	18	1	3	18
St. Petersburg, Fla.	101	71	11	13	1	5	11
Tampa, Fla.	92	57	18	11	1	5	10
Washington, D.C.	186	93	45	27	6	9	8
Wilmington, Del.	33	24	6	3	-	-	-
E.S. CENTRAL	1,059	721	214	69	27	28	104
Birmingham, Ala.	159	102	27	12	8	10	6
Chattanooga, Tenn.	98	69	23	5	1	-	17
Knoxville, Tenn.	103	74	16	6	3	4	19
Louisville, Ky.	191	132	43	11	4	1	9
Memphis, Tenn.	222	149	54	12	3	4	29
Mobile, Ala.	65	44	14	5	1	1	2
Montgomery, Ala.§	56	46	6	2	1	1	3
Nashville, Tenn.	165	105	31	16	6	7	19
W.S. CENTRAL	2,255	1,459	469	216	71	40	154
Austin, Tex.	90	61	16	10	1	2	14
Baton Rouge, La.	40	28	3	4	3	2	2
Corpus Christi, Tex.	66	42	15	6	2	1	5
Dallas, Tex.	297	181	68	34	8	6	21
El Paso, Tex.	68	48	13	2	4	1	7
Fort Worth, Tex	140	102	24	9	3	2	21
Houston, Tex.§	734	436	169	89	24	16	18
Little Rock, Ark.	84	51	27	4	1	1	8
New Orleans, La.	281	183	52	27	16	3	-
San Antonio, Tex.	232	164	42	17	6	3	22
Shreveport, La.	75	55	14	4	1	1	14
Tulsa, Okla.	148	108	26	10	2	2	22
MOUNTAIN	828	535	159	59	38	37	73
Albuquerque, N. Mex.	84	41	15	10	13	5	3
Colo. Springs, Colo.	43	35	3	3	2	-	7
Denver, Colo.	104	66	17	12	4	5	7
Las Vegas, Nev.	125	84	28	7	3	3	13
Ogden, Utah	28	19	4	2	1	2	1
Phoenix, Ariz.	220	137	46	13	10	14	15
Pueblo, Colo.	23	16	4	1	-	2	8
Salt Lake City, Utah	48	28	8	4	4	4	1
Tucson, Ariz.	153	109	34	7	1	2	18
PACIFIC	2,453	1,686	415	220	54	50	177
Berkeley, Calif.	22	16	1	4	-	1	-
Fresno, Calif.	125	99	13	8	3	1	24
Glendale, Calif.	48	36	5	5	2	-	8
Honolulu, Hawaii	79	50	21	5	1	2	4
Long Beach, Calif.	107	69	15	13	3	7	7
Los Angeles Calif.	845	563	151	82	25	7	37
Oakland, Calif.	75	44	16	9	3	3	7
Pasadena, Calif.	39	29	6	2	-	2	3
Portland, Oreg.	140	106	20	6	3	4	9
Sacramento, Calif.	165	109	30	10	1	7	17
San Diego, Calif.	172	124	27	11	5	5	18
San Francisco, Calif.	185	112	40	28	3	1	10
San Jose, Calif.	196	134	36	16	4	6	11
Seattle, Wash.	138	104	16	16	-	2	3
Spokane, Wash.	59	46	11	-	1	1	6
Tacoma, Wash.	58	45	7	5	-	1	13
TOTAL	15,630††	10,546	2,970	1,272	401	406	1,247

*Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

**Pneumonia and influenza.

†Because of changes in reporting methods in these 3 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

††Total includes unknown ages.

§Data not available. Figures are estimates based on average of past available 4 weeks.

Anemia — Continued

6. Puolakka J, Janne O, Pakarinen A, Jarvinen A, Vihko R. Serum ferritin as a measure of iron stores during and after normal pregnancy with and without iron supplements. Acta Obstet Gynecol Scand Suppl 1980;95:43–51.
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8. Meyers LD, Habicht J-P, Johnson CL. Components of the difference in hemoglobin concentrations in blood between black and white women in the United States. Am J Epidemiol 1979;109:539–49.

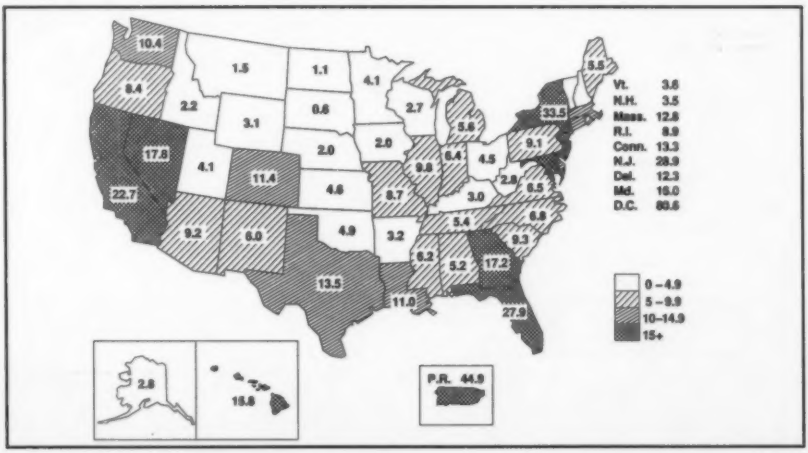
Current Trends

Update: Acquired Immunodeficiency Syndrome — United States, 1989

During 1989, state and territorial health departments reported 35,238 cases (14.0 per 100,000 population) of acquired immunodeficiency syndrome (AIDS) to CDC. Rates (reported cases per 100,000 population) were highest for blacks and Hispanics; for persons 30–39 years of age; in the Northeast region and in U.S. territories (primarily reflecting rates in Puerto Rico); in the largest metropolitan areas; and for men (Table 1). Rates varied widely among states (Figure 1).* As in previous years, most reported cases occurred among men who had had sex with other men (homosexual/bisexual men) (56%) and among heterosexual intravenous-drug users (IVDUs) (23%).

*The U.S. map will appear quarterly in the *MMWR*. More detailed information on AIDS cases is provided in the monthly *HIV/AIDS Surveillance Report*, including an expanded 1989 year-end summary issued January 1990; single copies are available free from the National AIDS Information Clearinghouse, P.O. Box 6003, Rockville, MD 20850.

FIGURE 1. Reported AIDS patients per 100,000 population, by state of residence — United States, 1989



AIDS — Continued

TABLE 1. Characteristics of reported persons with AIDS and percent change in cases, by year of report and year of diagnosis — United States, 1988 and 1989

Characteristic	1989 Reported cases	(%)	Rate*	1988 Reported cases	Percent change (1988 to 1989) Reported cases	Diagnosed† cases
Sex						
Male	31,307	(88.8)	25.8	28,654	9	13
Female	3,931	(11.2)	3.1	3,542	11	23
Age (yrs)						
<5	525	(1.5)	2.8	485	13	34
5–9	92	(0.3)	0.5	100	–8	–4
10–19	150	(0.4)	0.4	154	–3	–5
20–29	7,002	(19.9)	16.8	6,648	5	11
30–39	16,270	(46.2)	39.1	14,780	10	15
40–49	7,637	(21.7)	25.8	6,781	13	19
50–59	2,525	(7.2)	11.3	2,226	13	12
≥60	1,037	(2.9)	2.5	1,044	–1	3
Race/Ethnicity§						
White, non-Hispanic	18,689	(53.0)	9.8	17,248	8	10
Black, non-Hispanic	10,316	(29.3)	36.4	9,128	13	22
Hispanic	5,813	(16.5)	26.4	5,511	5	14
Asian/Pacific Islander	229	(0.6)	4.5	195	17	24
American Indian/ Alaskan Native	61	(0.2)	3.2	32	91	73¶
Region						
Northeast	10,718	(30.4)	21.3	11,574	–7	6
Midwest	3,436	(9.8)	5.8	2,919	18	22
South	11,053	(31.4)	13.0	9,091	22	22
West	8,515	(24.2)	16.8	7,324	16	12
U.S. territories	1,516	(4.3)	40.5	1,288	18	19
Population size of metropolitan area						
<100,000**	2,799	(7.9)	5.1	2,067	35	31
100,000–499,999	3,758	(10.7)	8.1	2,853	32	39
500,000–999,999	3,968	(11.3)	10.8	3,661	8	29
≥1,000,000	24,713	(70.1)	22.9	23,615	5	8
HIV exposure group						
Homosexual/bisexual men	19,652	(55.8)	††	18,130	8	11
Intravenous-drug users						
Women and heterosexual men	7,970	(22.6)	††	7,580	5	20
Homosexual/bisexual men	2,138	(6.1)	††	2,129	0	5
Persons with hemophilia						
Adult/adolescent	295	(0.8)	††	300	–2	–3
Child	26	(0.1)	††	39	–33	6¶
Transfusion recipients						
Adult/adolescent	768	(2.2)	††	869	–12	1
Child	40	(0.1)	††	66	–39	–42¶
Heterosexual contacts	1,562	(4.4)	††	1,229	27	36
Persons born in countries where heterosexual transmission predominates	392	(1.1)	††	374	5	24§§
Perinatal	547	(1.6)	††	468	17	38
No identified risk	1,848	(5.2)	††	1,012	–	–
Total	**35,238**	**(100.0)**	**14.1**	**32,196**	**9**	**14**

*Per 100,000 population.
†Based on cases from October 1, 1988, through September 30, 1989, compared with cases from October 1, 1987, through September 30, 1988, and adjusted for reporting delay. Reporting delays can be estimated reliably for cases diagnosed through September 1989.
§Excludes persons with unreported race/ethnicity.
¶Estimate of percentage change in cases may be unreliable because of small number of cases.
**Includes nonmetropolitan areas.
††Census data not available for calculation of rates.
§§This increase is due solely to an increase in cases diagnosed in the third quarter of 1989, which did not continue in the fourth quarter.

AIDS — Continued

The number of AIDS cases in 1989 can be compared with those in 1988 in two ways: 1) by using cases reported during these two periods, although these cases may have been diagnosed in earlier periods, and 2) by using cases diagnosed in these two periods and adjusting for reporting delays (*1*). These two comparisons yield different results for some categories of AIDS cases primarily because of changes in surveillance criteria, which were implemented in late 1987 (*2*).

Surveillance based on date of report. Compared with the 32,196 cases reported in 1988, AIDS cases reported in 1989 increased 9%. Large proportional increases occurred for cases reported in the South, in metropolitan areas with populations <500,000, and for persons exposed to human immunodeficiency virus (HIV) through heterosexual contact or perinatal transmission (Table 1). The largest proportional declines occurred among children infected with HIV through receipt of transfusions or clotting factors; smaller proportional declines occurred for adults who had received transfusions (Table 1).

Surveillance based on date of diagnosis. When 1989 and 1988 were compared based on cases diagnosed in comparable 1-year periods (October 1–September 30 [adjustments for reporting delays cannot be done reliably for the most recent quarter]), cases increased 14%. Other differences were: proportional increases among both blacks and Hispanics exceeded the increase for whites; cases increased in the Northeast, although proportionately less than elsewhere; the percentage increase for women was substantially greater than that for men; the percentage increase for heterosexual IVDUs exceeded that for homosexual/bisexual men; and cases due to perinatal HIV transmission had the largest increase among HIV exposure groups (Table 1).

Long-term trends. In mid-1987, trends in AIDS cases by date of diagnosis (adjusted for reporting delays) shifted—primarily reflecting a shift in trends for homosexual/bisexual men (Figure 2a). Cases among adult transfusion recipients and persons with hemophilia did not increase as rapidly as in earlier years and may have reached or neared their peaks (Figure 2b). Cases associated with heterosexual IV-drug use (Figure 2a), heterosexual contact (Figure 2c), and perinatal transmission (Figure 2d) continued to increase.

Reported by: Local, state, and territorial health departments. Div of HIV/AIDS, Center for Infectious Diseases, CDC.

Editorial Note: Analysis of surveillance data for AIDS cases elucidates trends in the characteristics of persons with severe HIV disease. Varying trends for different categories of AIDS patients in 1989 highlight the increasing complexity and extent of the HIV/AIDS epidemic.

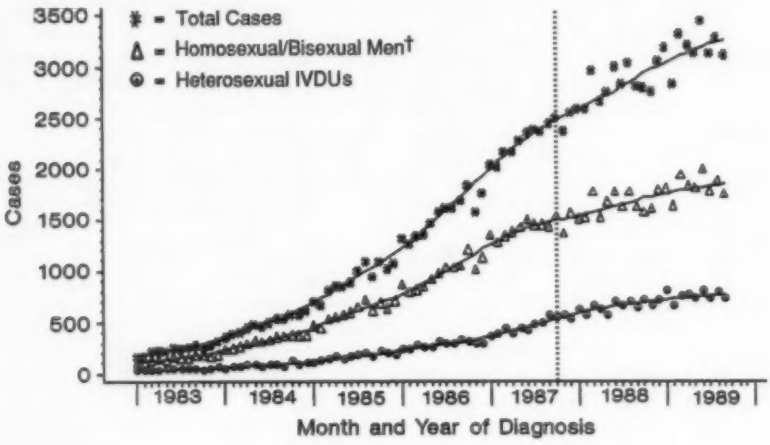
Interpretation of these trends is complex because of the expansion of AIDS surveillance criteria in late 1987 (*2*), which extended the usefulness of surveillance in describing severe HIV disease. The new criteria led to greater increases in reporting for cases in IVDUs, blacks and Hispanics, and persons living in the Northeast (*4*) than for AIDS cases in other persons. Also, some areas retrospectively reported cases that met the new criteria but were diagnosed before the new criteria were implemented (2289 such cases were reported in 1988 and 623 in 1989). There are also other temporal and geographic variations in reporting delays; thus, comparisons between 1988 and 1989 differ depending on whether date of diagnosis or date of report is used.

Cases diagnosed among homosexual/bisexual men continued to increase but not as rapidly as in previous years; this change is most apparent in cities such as New

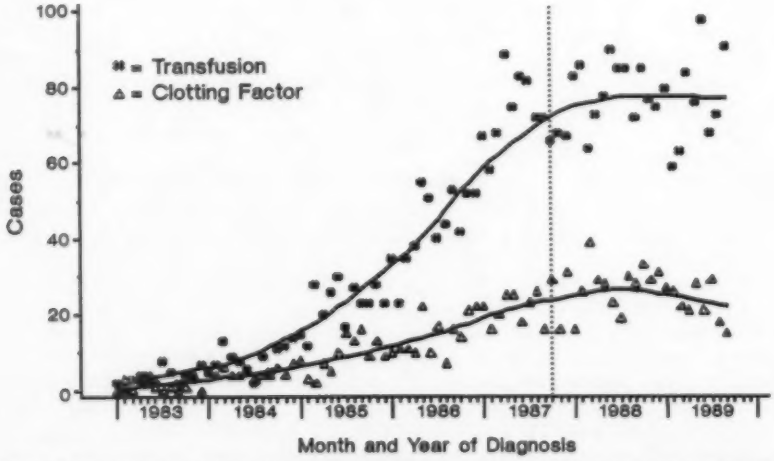
AIDS – Continued

FIGURE 2. AIDS cases, by month of diagnosis – United States, January 1983–September 1989*

a. All cases, homosexual/bisexual men, and heterosexual intravenous-drug users (IVDUs)



b. Adult and adolescent recipients of transfusions and clotting factors



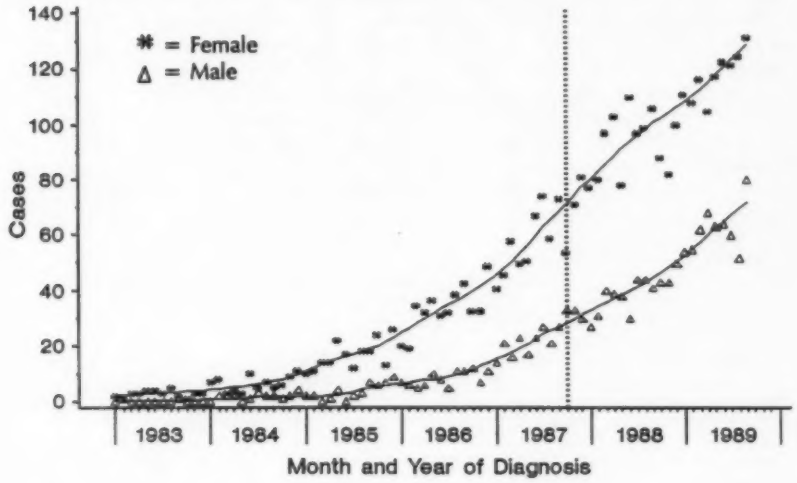
*Adjusted for reporting delays, by mode of HIV transmission. Points represent monthly incidence, lines represent "smoothed" incidence (*3*). The vertical lines represent the date of expansion of the AIDS case definition in 1987.

†Excludes IVDUs.

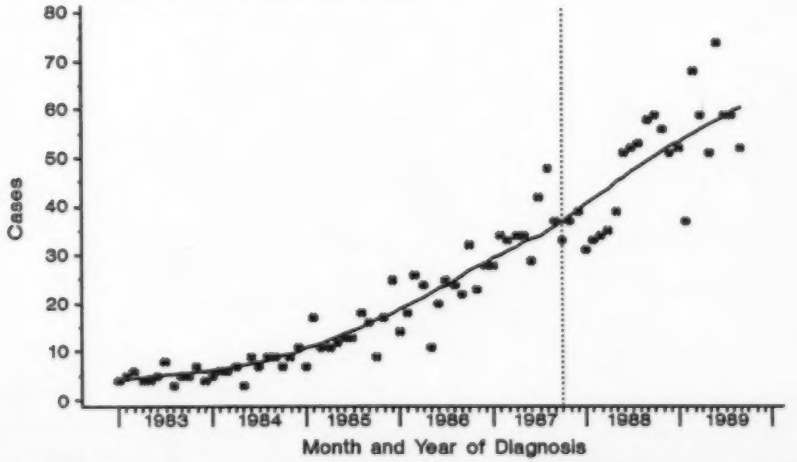
AIDS — Continued

FIGURE 2. AIDS cases, by month of diagnosis — United States, January 1983–September 1989* — Continued

c. Men and women infected with HIV through heterosexual contact (excludes persons born in countries where heterosexual transmission predominates)



d. Children infected with HIV by perinatal transmission



*Adjusted for reporting delays, by mode of HIV transmission. Points represent monthly incidence, lines represent "smoothed" incidence (*3*). The vertical lines represent the date of expansion of the AIDS case definition in 1987.

AIDS — Continued

York, San Francisco, and Los Angeles (*5*). Possible reasons for this observation include actual declines in the incidence of HIV infection, perhaps due to the success of prevention programs; the effect of treatments that delay progression of HIV disease; and a decrease in the completeness of reporting (*5,6*).

Since routine screening of donated blood for HIV antibody began in 1985, transmission of HIV through blood transfusions has become rare (*7*). Transfusion-associated AIDS now occurs predominantly among persons who received transfusions before screening began. Occurrence of such cases has leveled or possibly begun to decline, demonstrating the effectiveness of screening.

Increases in diagnosed cases were greatest for groups with little or no evidence of reductions in HIV incidence, such as IVDUs and associated groups (i.e., persons infected with HIV by heterosexual contact and perinatal transmission). Even though AIDS cases are heavily concentrated in the largest cities, the epidemic is increasingly affecting smaller communities.

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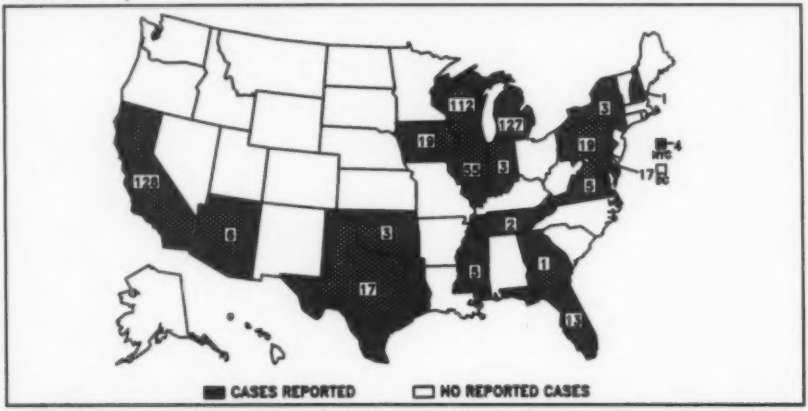
FIGURE I. Reported measles cases — United States, weeks 1–5, 1990



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The data in this report are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the succeeding Friday. The editor welcomes accounts of interesting cases, outbreaks, environmental hazards, or other public health problems of current interest to health officials. Such reports and any other matters pertaining to editorial or other textual considerations should be addressed to: Editor, *Morbidity and Mortality Weekly Report*, Centers for Disease Control, Atlanta, Georgia 30333; telephone (404) 332-4555.

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